

CLAIMS

WHAT IS CLAIMED IS:

1. A genetically engineered mammalian cell that
has been mutated by a process comprising the insertion
of a recombinantly manipulated polynucleotide sequence
into a gene in said genetically engineered mammalian
cell wherein said gene is identifiable as corresponding
to at least one of SEQ ID NOS: 1-248.

2. The genetically engineered mammalian cell of
Claim 1, wherein said cell is murine.

3. A cell according to Claim 2, wherein said cell
is an embryonic stem cell.

4. The genetically engineered mammalian cell of
Claim 1, wherein said polynucleotide sequence is present
on a viral vector.

5. A cell according to Claim 4, wherein said viral
vector is a retroviral vector.

6. A cell according to Claim 4, wherein said viral
vector additionally comprises regions of targeting DNA
that facilitate gene targeting by homologous
recombination.

7. An isolated murine embryonic stem cell line
comprising an engineered retroviral gene trap vector in
at least one gene comprising a polynucleotide sequence
identifiable as corresponding to any one of SEQ ID NOS:
1-248.

8. A method of generating antibodies against a human protein comprising introducing said human protein into a mouse having a genetically engineered mutation in a murine gene identifiable as corresponding to any one of SEQ ID NOS: 1-248, wherein said mouse produces antibodies against said human protein.

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